CLAIMS

1.   The PTPRK$_{Gly677 \to Arg682}$ immunogenic peptide of SEQ ID N. 1.

2.   A monoclonal or polyclonal antibody, or an active fragment thereof, which selectively binds the peptide of claim 1.

3.   An isolated nucleic acid molecule encoding the peptide of claim 1.

4.   An expression vector carrying the nucleic acid molecule of claim 3.

5.   A host cell containing the vector of claim 4.

6.   An isolated CD4+ T lymphocyte able to selectively recognize and bind the peptide SEQ ID N. 1 associated to a HLA-Class II molecule.

7.   A T lymphocyte according to claim 6, which selectively recognizes and binds a peptide/HLA-DR β1*1001 complex.

8.   Antigen presenting cells carrying the peptide SEQ ID N. 1 bound to a HLA-DR β1*1001 molecule.

9.   Pharmaceutical composition containing the peptide SEQ ID N. 1 or a nucleic acid molecule encoding it, in admixture with pharmaceutically acceptable excipients.

10.   The pharmaceutical composition of claim 9, in the form of a vaccine.

11.   The use of the peptide SEQ ID N. 1, of nucleic acid molecules encoding it, of APCs according to claim 8 or T lymphocytes according to claims 6-7, for the preparation of a medicament for the preventive or therapeutic treatment of cancer.

12.   The use claimed in claim 11, for the preventive or therapeutic treatment of melanoma expressing PTPRK$_{Gly677 \to Arg682}$.

13.   The use of peptide SEQ ID N. 1 or of a nucleic acid molecule encoding it for the preparation of a diagnostic composition.

14.   The use according to claim 13, wherein said diagnostic composition is utilized in the characterization of melanoma expressing PTPRK$_{Gly677 \to Arg682}$.